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Published: 01/10/2018

Document Version:
Peer reviewed version

[Link to publication in Bond University research repository.](#)

Recommended citation(APA):

Dulla, J., Dawes, J., Horrigan, J., Orr, R. M., & Lockie, R. G. (2018). *Perceived vs. Actual Reported Peace Officer Physical Job Demands: What Three Points in Time Tell Us*. Poster session presented at The 38th Annual Meeting of the Southwest Regional Chapter of the American College of Sports Medicine, Costa Mesa, United States.

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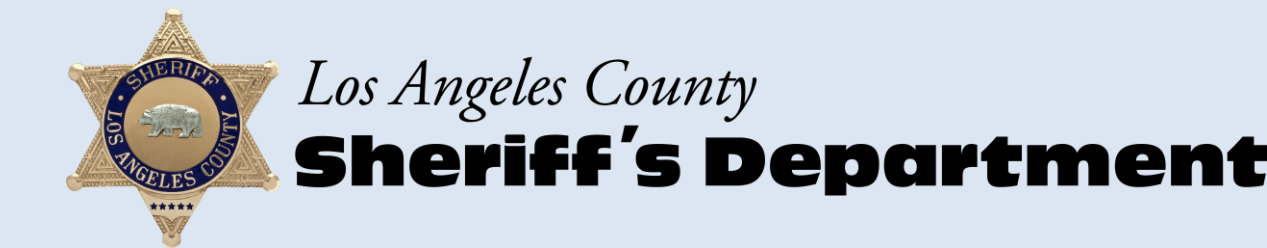
Perceived vs. Actual Reported Peace Officer Physical Job Demands: What Three Points in Time Tell Us

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ABSTRACT

A common perception among incumbents and some trainers is that muscular endurance and aerobic capacity are the most prevalent and important components of occupational fitness as they relate to the regular tasks of California Peace Officers assigned to daily patrol duties. The purpose of this study was to review job demand studies, and present the most recent data from a job task analysis for peace officers in California. In 1983, the California Commission on Peace Officer Standards and Training conducted a statewide physical job task-demands study². The data of 1,625 officers showed that the underlying fitness components of agility, anaerobic capacity, anaerobic power, and strength were more predominant in daily peace officer tasks than muscular endurance and aerobic capacity. As a result, a five event Work Sample Test Battery (WSTB)⁴ was developed and validated. With the exception of a 500-yard run, the other four WSTB events (99-yard obstacle course, chain link fence climb, solid wall climb, dummy drag) assessed components of agility, strength, power, and anaerobic capacity. In a 2008-2010 survey of Los Angeles County Sheriff's Deputies¹ assigned to patrol duties, components of fitness reported as important by Deputies (n=162) were: 15% strength; 15% muscular endurance; 13% power; 13% anaerobic power; 12% trunk strength; 11% equilibrium; 11% flexibility; and 10% aerobic capacity. An even larger 2018 statewide survey of California peace officers assigned to patrol duties (question responders = 2,874-3,937)³ provided the following data pertaining to components of fitness required for patrol officer tasks: 17.9% stability; 14.4% flexibility; 13.3% power; 13.3% agility; 12.3% anaerobic capacity; 10.3% muscular strength; 8.25% muscular endurance; 5.6% balance; and 4.6% aerobic capacity. Taken together, the results from these large-scale job demand studies indicate the reported importance by those assigned to patrol duties of anaerobic qualities (e.g. strength and power). Training programs used to develop future peace officers that are weighted toward muscular endurance and aerobic capacity may limit the adaptive responses actually required in the day-to-day physical tasks of patrol officers. To increase effectiveness and optimize job-relevant performance, physical training programming should more closely target and reflect the actual components of fitness of stability, power, agility, muscular strength, muscular endurance, balance, and aerobic capacity.

INTRODUCTION

- Essential job tasks for law enforcement officers (LEOs) include numerous physical motions such as pushing, pulling, dragging, running, and other physically demanding body movements.^{1,2,3} These actions are often completed while the LEO is under load carriage conditions (bullet-resistant vest, gun belt, and other equipment). However, the actions could also be completed while not under the same load (the LEO not wearing the above listed protective equipment).
- To ensure candidates and employees can successfully complete required job tasks, a job task analysis is an industry-accepted first step.
- A job task analysis (a survey of tasks performed by employees) at the state or local level is part of a multi-step process that forms the basis for selection standards, training, rehabilitation, and "return to play/duty" standards.
- In the case of Law Enforcement Agencies, these types of analysis are often conducted at the state level by a Commission on Peace Officer Standards and Training (POST Commission).
- The physical job task analysis process requires respondents (usually subject matter experts [SME] and incumbent patrol officers) to rate the criticality, frequency, and time spent performing specific tasks. The responses are then grouped into underlying physiological constructs such as aerobic/anaerobic capacity, muscular strength and endurance, power, agility, stability, balance, etc.
- The purpose of this study was to review job demand studies, and present the most recent data from a job task analysis for LEOs in California.

METHODS

- For this inquiry, three large scale studies were reviewed. The first and third studies were conducted by the California Commission on Peace Officer Standards and Training (CA POST) and the third was a local study by the Los Angeles County Sheriff's Department (LASD).
- Study #1 (CA POST-1)² was conducted in 1983 and surveyed 1,625 LEO's on physical abilities required of the California patrol officer by frequency performed, importance/criticality to success, time spent performing.
- Study #2 (LASD)¹ was conducted between 2008-2010 and surveyed 162 deputies assigned to patrol duties in Los Angeles County.
- Study #3 (CA POST-2018)³ was conducted in 2018 survey (question responders = 2,874-3,937) and on physical abilities required of the California patrol officer by frequency performed, importance/criticality to success, time spent performing.
- Subject matter experts assigned to each study at the respective point in time each study was conducted rated physical tasks identified in surveys and assigned each tasks to an underlying physiological construct. Following this, underlying physiological constructs from each study was compared.

RESULTS

- Study #1 (CA POST-1 from 1983)² contained limited information and the showed that the underlying fitness components of agility, anaerobic capacity, anaerobic power, and strength were more predominant in daily peace officer tasks than muscular endurance and aerobic capacity
- Study #2 (LASD)¹ contained greater information and the distribution of underlying physiological constructs are depicted in Figure 1.
- Study #3 (CA POST-2018)³ contained similar information to Study #2 and the distribution of underlying physiological constructs are depicted in Figure 2.

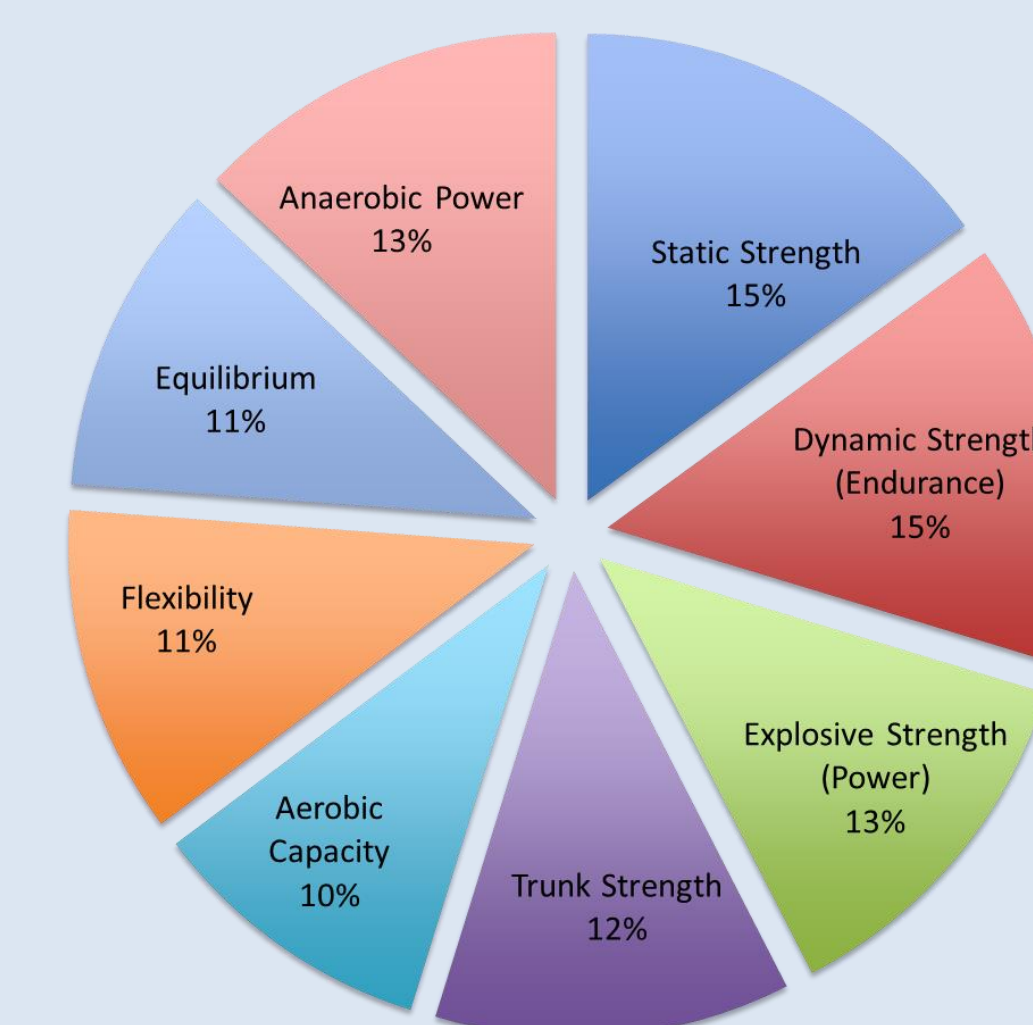


Figure 1. LASD patrol physical abilities distribution based on LASD SME input.

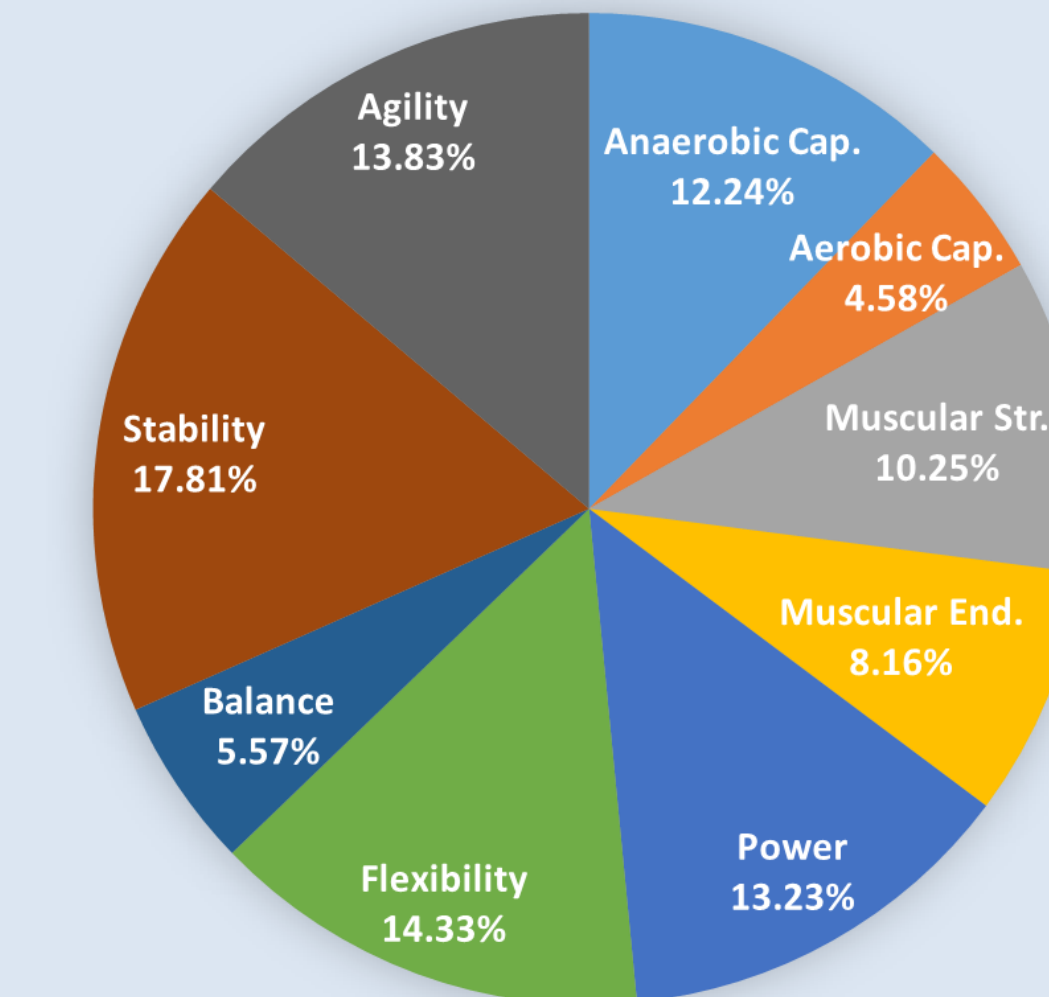


Figure 2. CA POST-2 relative contribution of patrol physical abilities distribution based on statewide SME input.

CONCLUSIONS

- When the results of all three large scale studies^{1,2,3} are examined for trends, the reported importance by those assigned to patrol duties appear to focus on the constructs of anaerobic qualities, strength, and power. Agility also consistently ranked highly.
- The prevalence of stability in Study #3 (POST-2-2018)³ can be attributed to more precise definitions of constructs for this specific study. The Study #3 stability trend can also be observed in Study #2 (LASD) under the equilibrium category.
- Taken together and longitudinally, these job task analyses indicate that numerous respondents (SME and California patrol officers) over nearly 35 years continually rate the underlying physiological constructs required in patrol work as stability/equilibrium, anaerobic, agility, strength, and power as more prevalent (importance/critical, frequent, and time spent performing) and than muscular endurance and aerobic tasks.
- The five event CA POST Work Sample Test Battery⁴ (a state required physical ability test to graduate all peace officer academies) is also reflective of these observed trends.
- As a result, law enforcement physical training programs should as closely as possible reflect the reported physical ability demands of the patrol function to ensure successful completion of required physical job tasks.

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